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2003 OCT 31 P 4: 13

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October 31, 2003

Mr. Brian Bozzo, Compliance Manager
Arizona Corporation Commission
1200 W. Washington St.
Phoenix, Arizona 85007

Re: Johnson Utilities Company
Compliance with Decision No. 64062
ACC Docket Nos.: WS-02987A-99-0583; WS-02987A-00-0618

Dear Mr. Bozzo:

As referenced in my October 3, 2003 letter to you, enclosed please find Johnson Utilities Company's ("JUC") documentation of compliance with Arizona Department of Environmental Quality ("ADEQ") regulations for its **wastewater** systems, filed herewith in accordance with Decision No. 64062 as amended by Decision No. 65840. The deadline for filing this documentation is November 4, 2003.

Should you have any questions, please do not hesitate to contact me. Thank you for your time and consideration in this matter.

Very truly yours,

Patrick J. Black

Arizona Corporation Commission

DOCKETED

enclosure

cc: Ernest Johnson, Utilities Director
Christopher Kempley, Chief Counsel
Lyn Farmer, Chief Administrative Law Judge
Marlin Scott, Engineer
Brian Tompsett, Johnson Utilities
Docket Control

OCT 31 2003

DOCKETED BY	
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Janet Napolitano
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street • Phoenix, Arizona 85007
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Stephen A. Owens
Director

OCT 28 2003

Ref: #FS04-357
October 23, 2003

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

Mr. George Johnson
Johnson Utilities Company
5230 East Shea Blvd.
Scottsdale, Arizona 85254

Re: **Annual Compliance Inspection of the Johnson Utilities Section 11 Wastewater Treatment Plant (WWTP), Inventory No. 103081, Aquifer Protection Permit (APP) No. P103081 Reuse Permit No. R103081**


Dear Mr. Johnson:

The Water Quality Field Services Unit (WQFSU) of the Arizona Department of Environmental Quality (ADEQ) has enclosed an inspection report regarding the inspection conducted at the above referenced facility on October 8, 2003. The inspection was conducted to determine compliance with Arizona Revised Statute (A.R.S.) Title 49, Chapter 2, Article 9 and Arizona Administrative Code (A.A.C.) Title 18, Chapter 2, and pursuant to the authority in A.R.S. §49-203(B)(1) and A.A.C. R18-9-110(A).

As indicated in the enclosed "Summary of Inspection," no deficiencies were noted. Some reporting deficiencies previously noted in a letter from ADEQ, dated September 22, 2003 were clarified during the inspection. The missing data is being resubmitted to ADEQ in amended SMRFs for the last several quarters. There is a recommendation noted at the end of the report.

ADEQ thanks you for your efforts in protecting public health and the environment.

Sincerely,


William J. Hare/ E.P.S.
Water Quality Field Services Unit

WJH:wjh:Insp.wpd

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Attachments: I. Summary of Inspection

cc: Pinal County Health Department (w/attach)
Reading file
Vivian Burns, Program and Project Specialist

ATTACHMENT I

SUMMARY OF INSPECTION

Johnson Utilities Section 11 Wastewater Treatment Plant

Compliance Inspection

Date of Inspection: October 15, 2003

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION - WATER QUALITY COMPLIANCE SECTION
Field Services Unit

SUMMARY OF INSPECTION - WASTEWATER

Facility: Johnson Utilities Section 11 WWTP

Place ID: 142

Aquifer Protection Permit No: P103081

Inventory No: 103081

NPDES No: N/A

Reuse Permit No: R103081

Inspected by: William J. Hare, E.P.S.

Inspection Date: October 15, 2003

Accompanied by: Brian Tompsett, P.E.
Gerry Beeler, Maurice Lee

Report Date: October 23, 2003

YES NO N/A UNKNOWN

1. WWTF meets the following permit requirements:

- A. Aquifer Protection Permit
- B. Reuse Permit
- C. NPDES Permit

- 2. A certified operator is employed by the owner as by ADEQ regulations.
- 3. This system meets APP permit requirements for facility inspections as noted in Table III of the permit.

X			
X			
		X	
X			
X			

Facility Description:

The Johnson Utilities Section 11 WWTP is located adjacent to Hunt Highway, approximately nine miles southeast of Queen Creek. The WWTP has the capacity to collect and treat up to a maximum monthly average flow of 1.6 million gallons per day flow (MGD) of wastewater received from residences and small businesses located in the central and southern portions of the Johnson Utilities service area. The treatment process consists of a headworks with a bar screen, a flow splitter box, four aerated lagoons, 32 wetland cells, liquid chlorine disinfection and an effluent pump station. All of the lagoons and 32 wetland cells of the WWTP have a permeability of less than 550 gallons per day per acre. The WWTP process employs nitrification-denitrification to achieve an effluent Total Nitrogen level of 10 mg/L and chlorine disinfection.

Annual Compliance Inspection of the Johnson Utilities Section 11 WWTP

Report Date: October 23, 2003

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Summary of Inspection:

The following comments are based on observations made by the WOFSU staff during the inspection and comments made by the Johnson Utilities Section 11 WWTP staff to ADEQ during the inspection:

General Information:

The facility appeared to be operating adequately at the time of the inspection. The monthly average for influent daily flow rates has ranged from 350,000 - 375,000 g.p.d in recent months. Peak flows have exceeded 450,000 g.p.d. The facility has just begun to discharge from the wetland cells in September of 2003 to the effluent wetwell. Prior to that date, effluent was reported to be consumed in evaporation, transpiration in the wetland cells. The discharge from the effluent wetwell is being directed to one of several recharge basins as authorized in the APP.

The facility reported that there are about 3,689 homes connected to the sewer system as of September 30, 2003. This includes about 400 homes from the San Tan Heights Community and 200 homes from the Copper Basin Community. Both San Tan and Copper Basin communities will eventually have their own WWTPs. Influent flows to a common vault, where it is pumped to the Section 11 WWTP. A 1.0 MGD WWTP is being constructed at the San Tan Community area. Construction of the Cooper Basin WWTP has yet to commence. The facility currently has a design capacity of 1.6 million gallons per day (MGD). The Arizona Corporation Commission (ACC) has issued a Certificate of Convenience and Necessity (CCN) for this utility that authorizes the treatment of up to 2.4 MGD of wastewater within in the service area of the WWTP.

APP Inspection:

1. The Aquifer Protection Permit was amended with an effective date of June 12, 2002. This amendment raised the flow limit of this facility from 300,000 g.p.d. to 1.6 MGD. The permit amendment also implemented a compliance schedule for the construction of a new point of compliance (POC) monitoring well and noted that the monitoring and reporting frequency was "reserved". The Alert Levels and Aquifer Quality Limits (AQL) will be established after eight (8) rounds of groundwater samples are obtained as explained in Section 3.0 of the APP. The new POC monitoring well has been constructed and the data from the well has been submitted to ADEQ. The referenced Compliance Schedule also notes that the submission of an annual report summarizing the effects of the Nitrogen on the surrounding groundwater as a result of the recharge operation. This report is due to ADEQ by the end of the 2003 calendar year.

2. A file review was conducted by ADEQs Water Quality Compliance Section on October 6, 2003 regarding the last several quarters of data. The review noted the absence of several items in the APP required monitoring during the last year. Some of these items were provided to ADEQ on the day prior to the inspection and were reviewed during the inspection. The missing data is being provided to ADEQ

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and will be included in amended SMRFs that are being submitted to ADEQ on October 20, 2003. This included the monthly monitoring of Total Coliform from the POC monitoring well that is required on a monthly basis. It should be noted that the Total Coliform monitoring is required to be submitted to ADEQ on a monthly basis. The following deficiencies that were noted in the October 6, 2003 file review were resolved during the inspection:

Missing Item

Missing data for Fecal Coliform for 1st and 2nd quarters of 2002- effluent wetwell.

Status

No effluent had reached the effluent wetwell prior to September of 2003 and hence no monitoring was conducted.

Missing data from TKN, Nitrate and Total Nitrogen 2nd quarter of 2002 - effluent wetwell

No effluent had reached the effluent wetwell prior to September of 2003 and hence no monitoring was conducted.

No data for Static Water level in the POC well for April-July 2002

Provided to ADEQ on amended forms as of October 20, 2002

No data for Static Water level and Total Nitrogen in the POC well for October - December 2002

Provided to ADEQ on amended forms as of October 20, 2002

No data for Total Nickel in POC well for 2nd quarter of 2003.

Previously provided in original submission.

Missing data for Total Coliform in POC well for several months including March, April, June, July, August and October of 2002

Provided to ADEQ on amended forms as of October 20, 2002- **This is due to ADEQ Monthly**

AQL exceedance in November of 2002 for Total Coliform POC monitoring well.

Original submission shows no violation This is verified by the original lab sheet.

3. The WWTP has six aerated, lined lagoons about 1-3 acres each. The facility was utilizing all of the aerated lagoons. All but one of the floating aerators was operational at the time of the inspection. The operator noted that a scheduled repair of the disabled aerator has been arranged for the following week. The color of most of the aerated lagoons was good. One of the lagoons appeared to have a brown color possibly attributed to excessive solids within the cell. The operator noted that it was possible that on some days the smaller lagoon with poor color was occasionally organically overloaded with solids. No odor was prevalent from the lagoons. The water depth was reported to be about seven feet deep with five feet of freeboard.

4. The operator noted that wastewater from the aerated lagoons is diverted to twenty-five acres of wetland cells. The lined, wetland cells are arranged in 16 pairs, for a total of 32 wetland cells. Each pair

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has a deep cell that flows via gravity to a more shallow cell. The amount of cattails and bullrush plants varied in the various cells. The center area of the deeper wetland cells did not contain any plant growth, because cattails and bullrush prefer more shallow waters. Each wetland cell had adequate freeboard. Several of the lower wetland cells located further from the splitter box (cell pairs 1-5) appeared to have moderate amounts of dead vegetation due to lower water flows. However, at the base of the plants that appeared to have brown color, healthy new growth was evident. It is recommended that the facility attempt to divert more wastewater to the cells that have dead vegetation. The APP does note that healthy species should predominate in the wetland cells.

5. Discharge monitoring from the effluent pump station has just commenced since the WWTP has just begun to discharge from the wetland cells. As of September 18, 2003, the facility began to discharge to one of the recharge basins from the effluent wetwell.

6. The inspection noted that the facility had installed a new POC groundwater monitoring well and has been conducting groundwater monitoring from the new well. This newly installed POC well is not noted in the APP. The APP must be amended to include the new monitoring well, that was required in the Compliance Schedule. Groundwater monitoring from the POC well is required for various constituents including: various forms of Nitrogen, Total Coliform, heavy metals, and volatile organic compounds (VOCs). This has been accomplished. The facility must submit a letter to ADEQs WPS and request an amendment to the existing APP regarding the monitoring well.

Reuse Permit Inspection:

No discharges to the permitted reuse site have occurred. Discharges to the reuse site are not anticipated in the near future due to the presence of the recharge basins. The facility is required to submit the SMRFs for the Reuse Permit No. R103081 on a quarterly basis, whether or not any discharges to the reuse site have occurred. The SMRFs are due to ADEQ by the 30th day of the month following the quarter.

Compliance Summary

1. Monitoring and Reporting Requirements.

(a) The APP No. P103081 requires daily monitoring of the influent for pH and flow. Effluent monitoring is required when discharges occur from the effluent pump station. Effluent is monitored daily for Fecal Coliform, monthly for Total Nitrogen, and quarterly for heavy metals and VOCs. Groundwater monitoring is required monthly for the water level within the well and Total Nitrogen and quarterly for heavy metals and VOCs.

Rating: Compliance.

(b) The APP also has a compliance schedule which requires the submission of plans and drawings for a new POC well. The groundwater data from the new POC well was also not provided. This was due to ADEQ by September 12, 2002. This requirement was completed. The Compliance Schedule also requires the submission of an annual report during 2003 which addresses the effect

Annual Compliance Inspection of the Johnson Utilities Section 11 WWTP

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of Nitrogen on the groundwater from the Recharge Project. This is pending in 2003.

Rating: Compliance

(C) The Reuse Permit No. R103081 requires the monitoring of effluent prior to being pumped to the golf course storage ponds at the permitted Reuse Site, Oasis Golf Course. No effluent has been delivered to date. The required monitoring will be daily for flow readings, turbidity, and Fecal Coliform; monthly for pH; and semi-annual for the Enteric Virus. The SMRFs were submitted to ADEQ within the prescribed time limits.

Rating: Compliance.

2. **Operator Certification Requirements.** The WWTF is classified as a Class 2 WWTP and the collection system is classified as a Class 1 Collection System. Jerry Beeler is the operator who holds a Grade 4 WWT and a Grade 4 WWC license issued by ADEQ.

Rating: Compliance.

3. **Operation & Maintenance (O&M) Requirements.** The facility was in compliance with the facility inspection and operational monitoring requirements noted in Table III of the APP. This includes freeboard, water level in the lagoons, pump integrity and no cracks or tears were observed in the liner.

Rating: Compliance.

Recommendations:

Make attempts to direct more effluent to the lower wetland cells or if necessary potable water (Cell Numbers 1-5). The vegetation in those cells appeared more 'stressed' from a lack of water.

END OF REPORT